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C. & G. SURVEY, LIBRARY AND AND ANDREYUNG OCT 2 4 1910 Aco. No.

Diag Cht. No. 8507-1

Department of Commerce and Cabor						
COAST AND GEODETIC SURVEY						
Superintendent.						
State: Clas/Ca						
DESCRIPTIVE REPORT.						
Sheet No.						
LOCALITY:						
approach to Austragalo						
Bay-Vicinity of Etole						
PX						
- 3						
1900						
CHIEF OF PARTY:						
Ub C. Dibrell						

3101

DEPARTMENT OF COMMERCE AND LABOR

Coast and Geoffetic Survey

O.H.Tittmann, Sup't.

C. & G. SURVEY, LIBRARY AND ARCHUMAN NOV 2 -1910
ACO No.

Hydrographic Sheet No.3121

(Field Letter "B")

APPROACH TO NUSHAGAK BAY, ALASKA, OFF ETOLIN POINT

Steamer EXPLORER

Walter C. Dibrell, Assistant, Chief of Party

Begun : July 5

Completed: July 11

1910

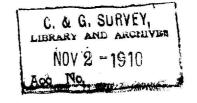
SCALE 1 - 40000

Hydrography in charge of A. R. Hunter, W.O. Positions and Soundings plotted on boat sheet by A. R. Hunter, W.O.

Plane of reference is mean of lower low maters observed at Protection Point from June 27,1910 to July 23,1910, inclusive. Plane of reference reads 8.2 on tide staff.

Soundings in feet.

# 3191



Hydrographic Sheet No.....

3

#### OBSERVERS

A. R. Hunter, W. O.

R. R. Lukens, Aid

RECORDERS

H. Olsen, Wr. 2 cl.

#### LEADSMEN

William Duker, Q'mr. 2cl. John G. Hanson, "

#### TIDE OBSERVERS

Ed. Callaway, Seaman

Alfred Pedersen, Seaman

Tide Gauge at Protection Point.

DESCRIPTIVE REPORT TO ACCOMPANY HYDROGRAPHIC SHEET #\_3/9/ (FIELD LETTER B ), APPROCH TO NUSHAGAK BAY, ALASKA, OFF ETOLIN POINT. SCALE 1 - 40 000.

This sheet shows the hydrographic development of a narrow belt in the vicinity of Etolin Point just outside the extensive flat that borders this part of the coast. The area covered is 12 miles in length and varies in breadth from 2 1/2 to 5 1/2 miles. The sheet joins hydrographic sheet #3180 (1909) on the north and west and sheet "C" (1910) on west and south. It is overlapped by three or four lines of sheet #3180.

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- 2. The area covered is all shoal or intersected by shoals, and all of the work was done with the launch. The lines are spaced on the average about 400 meters apart.
- 3. At northern limit of sheet the low water line lies about 1 1/2 miles off shore; from Etolin Point to south-eastern limit of soundings it parallels the bluff at a distance of 2 miles. The area that uncovers is very flat. Outside of Etolin Point it is hard sand with numerous small boulders. North-ward of the Point flat is sandy along outer edge and very sticky mud along the shore.
- 4. Along western edge of northern part of sheet is a long narrow sand shoal which uncovers in places at low water. Between the shoal and the flat is a channel with deep water. This channel is continuous up to Ekuk Bluff and it is referred to in my general descriptive report of Nushagak Bay (May 27,1910) in paragraph 42, page 15. Five miles south-westward of Etolin Point the shoal above referred to ends and the channel here joins the open waters of Bristol Bay. This channel carries sufficient water for vessels,

the least being a little over 3 fathoms near the lower end, but it is restricted, difficult to navigate, and there is little occation to use it since there is a better one immediately to westward. It affords anchorage, however, just above Etolin Point, apparently sheltered fairly from south-east and south-west gales by the shoals.

- 5. Four miles southward of Etolin Point the detached shoals disappear, and from there south-eastward to the limit of the hydrography. Etolin Bank is very flat and shoals gradually toward the shore with some unimportant irregularities. The three-fathom curve lies 2 1/2 miles off Etolin Point and draws gradually off to 6 1/2 miles at the southern limit developed on this sheet.
- 6. The positions and soundings have been plotted by the field party, but the sheet is transmitted uninked. The curves have been drawn but revision may be necessary. In drawing the curves it is necessary to bear in mind the action of the currents. The curves should in general trend with the direction of the current. To obtain a sufficient number of soundings to make the position and direction of the curves everywhere readily apparent would greatly increase the cost of the work and materially cut down the area that could be covered in a season.

Respectfully submitted,

Nushagak, Alaska,

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September 13,1910.

Ass't., C. & G. Survey,

Chief of Party.

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Hydrographic Sheet No...

L. & G. SURVEY,

NOV 2 - 1910

### STATISTICS

÷					Ac	S. Do	
Date . 1910	Val.	Let.	Miles (Stat.)	Sdgs.	Angles	Remark	s
July 5	2	- c	25.0	649	226	Launch #	38
, <b>u</b> 6	2	d	25.0	721	206	u	u
<b>u</b> 7	2&3	e	33.0	795	232	u	u
" 11	3	A STATE OF THE STA	43.0	1051	288	" U	W
		3					
				100			
×							
4	4	4	126.0	3216	952		

Area . #/....sq.stat. miles.

VEC Dec.1,1911.

#### HYDROGRAPHIC SHEET 3191.

2822/1/11

Etolin Point, Nushagak Bay, Alaska, by Asst. W. C. Dibrell in 1910.

TIDES.

	;	Protection Point ft.
Mean lower low water, o plane of reference		8.32
Lowest tide observed	n n	5.20
Highest " "	n n	27.30
Mean rise and fall of	tides	12.46

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TIDAL ITTEMO.

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The ana within the limits of this sheet

is fairly well covered. The sounding records

were keft in a clear and satisfactory manner

HALLimons